

Public Health Preparedness and Situational Awareness Report: #2019:28

Reporting for the week ending 07/13/19 (MMWR Week #28)

July 19th, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

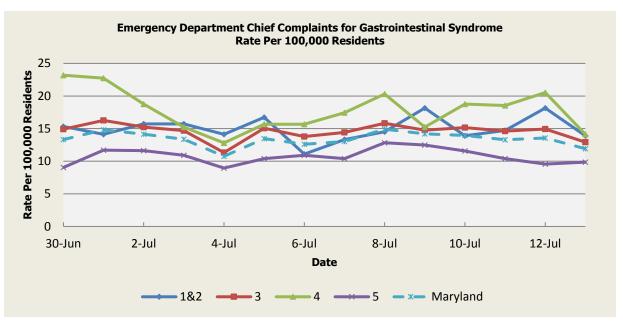
National: No Active Alerts

Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

Gastrointestinal Syndrome

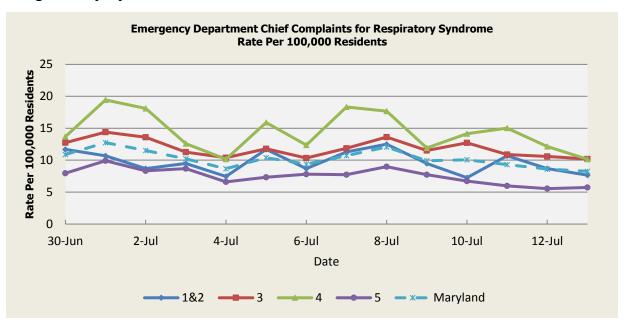


There were no Gastrointestinal Syndrome outbreaks reported this week.

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	13.26	15.10	15.91	10.24	13.15		
Median Rate*	13.11	14.87	15.46	10.13	13.00		

^{*} Per 100,000 Residents

Respiratory Syndrome

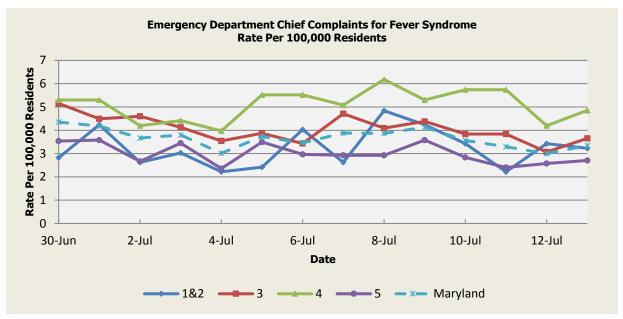


There was one (1) Respiratory Syndrome outbreaks reported this week: One (1) outbreak of Pneumonia in a Nursing Home (Region 5).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	12.65	14.73	15.08	9.97	12.76		
Median Rate*	12.10	14.18	14.35	9.65	12.28		

^{*} Per 100,000 Residents

Fever Syndrome

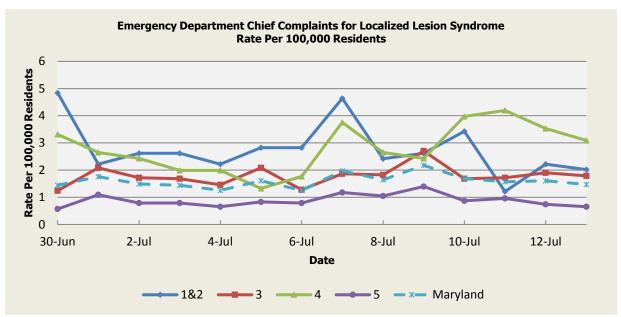


There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	3.08	3.90	4.11	3.04	3.52	
Median Rate*	3.02	3.80	3.97	2.92	3.40	

*Per 100,000 Residents

Localized Lesion Syndrome

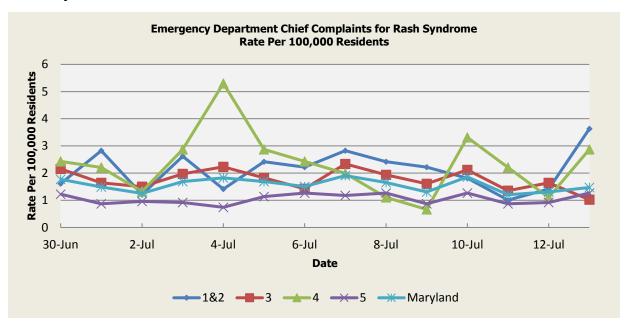


There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	1.13	1.79	2.04	0.91	1.42		
Median Rate*	1.01	1.72	1.99	0.87	1.37		

^{*} Per 100,000 Residents

Rash Syndrome

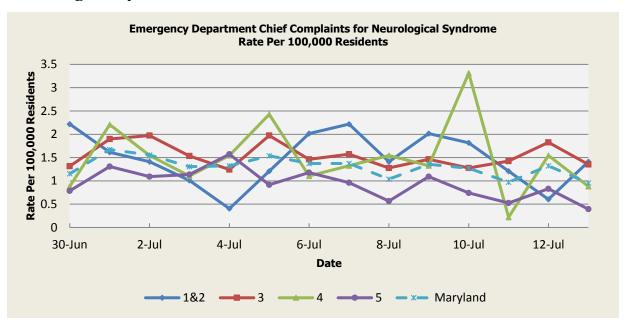


There were two (2) Rash Syndrome outbreaks reported this week: one (1) outbreak of Hand, Foot, and Mouth Disease associated with a Daycare Center (Region 3); one (1) outbreak of Scabies in an Assisted Living Facility (Region 3).

	Rash Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	1.24	1.68	1.76	0.98	1.38		
Median Rate*	1.21	1.61	1.77	0.92	1.32		

^{*} Per 100,000 Residents

Neurological Syndrome

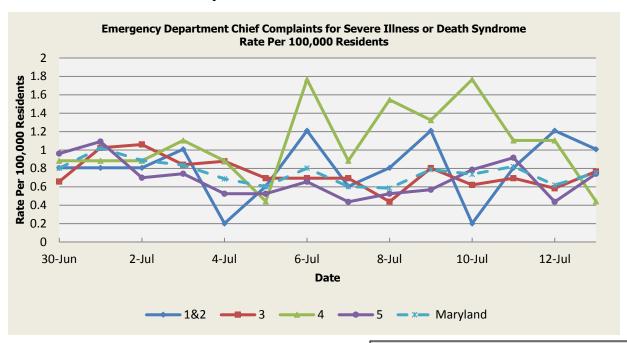


There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.77	0.94	0.86	0.60	0.79	
Median Rate*	0.81	0.84	0.66	0.52	0.70	

^{*} Per 100,000 Residents

Severe Illness or Death Syndrome



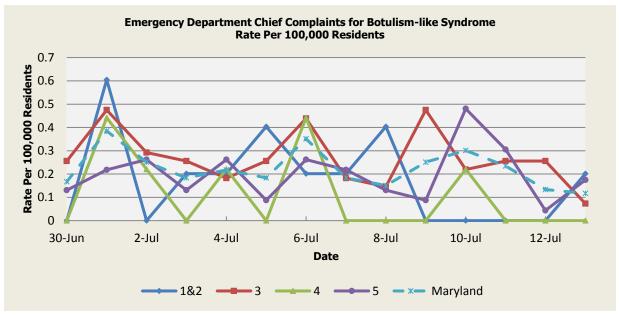
There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	0.66	0.90	0.83	0.51	0.73			
Median Rate*	0.60	0.84	0.66	0.48	0.69			

^{*} Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome

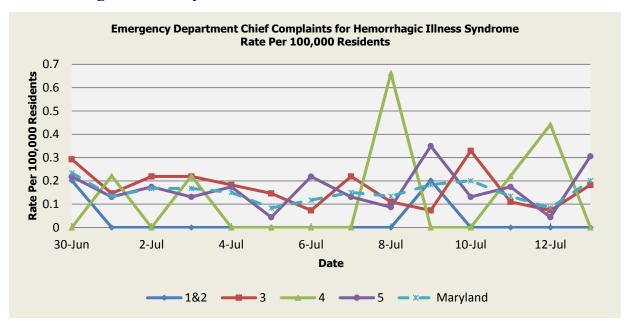


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 7/1 (Regions 1&2,3,4,5), 7/2 (Regions 3,4,5), 7/3 (Regions 1&2,3), 7/4 (Regions 1&2,4,5), 7/5 (Regions 1&2,3), 7/6 (Regions 1&2,3,4,5), 7/7 (Regions 1&2,5), 7/8 (Region 1&2), 7/9 (Region 3), 7/10 (Regions 4,5), 7/11 (Regions 3,5), 7/12 (Region 3), 7/13 (Regions 1&2,5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.07	0.12	0.06	0.08	0.10		
Median Rate*	0.00	0.07	0.00	0.04	0.08		

^{*} Per 100,000 Residents

Hemorrhagic Illness Syndrome

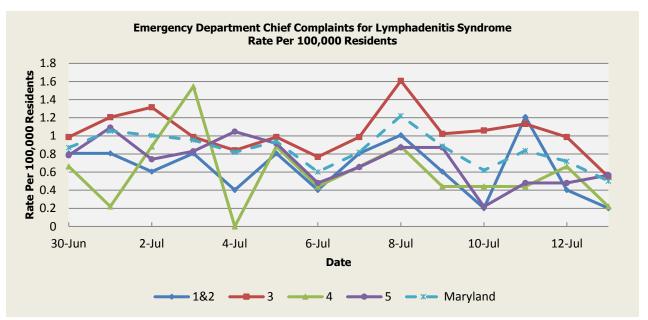


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 6/30 (Region 1&2), 7/1 (Region 4), 7/3 (Region 4), 7/8 (Region 4), 7/9 (Regions 1&2,5), 7/10 (Region 3), 7/11 (Region 4), 7/12 (Region 4), 7/13 (Region 5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.04	0.16	0.04	0.13	0.13		
Median Rate*	0.00	0.11	0.00	0.09	0.08		

^{*} Per 100,000 Residents

Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 6/30 (Regions 1\$2,5), 7/1 (Regions 1&2,3,5), 7/2 (Regions 3,4), 7/3 (Regions 1&2,4,5), 7/4 (Region 5), 7/5 (Regions 1&2,4,5), 7/7 (Region 1&2), 7/8 (Region 1&2,3,4,5), 7/9 (Region 5), 7/11 (Region 1&2). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.37	0.59	0.40	0.38	0.47		
Median Rate*	0.40	0.47	0.44	0.35	0.42		

^{*} Per 100,000 Residents

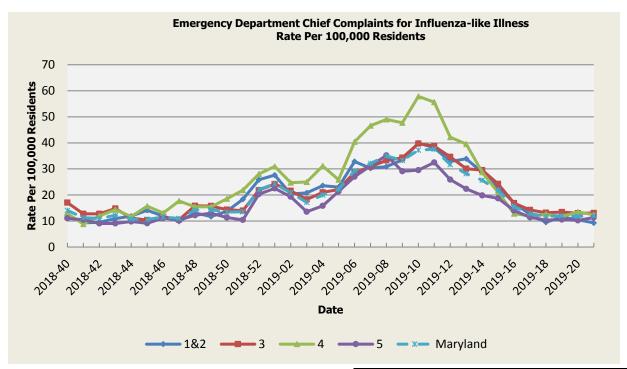
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.
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SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019).

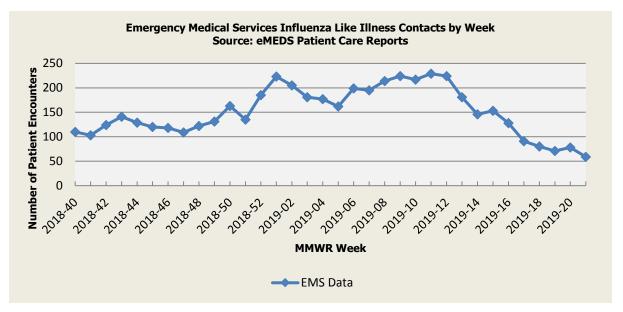
Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	10.26	13.39	12.94	11.33	12.30	
Median Rate*	7.66	10.38	9.27	8.80	9.49	

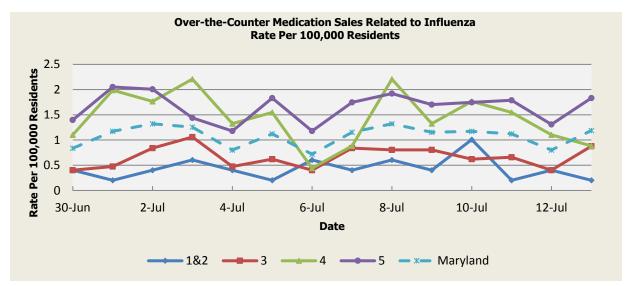
^{*} Per 100,000 Residents

Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Influenza-Related Medication Sales

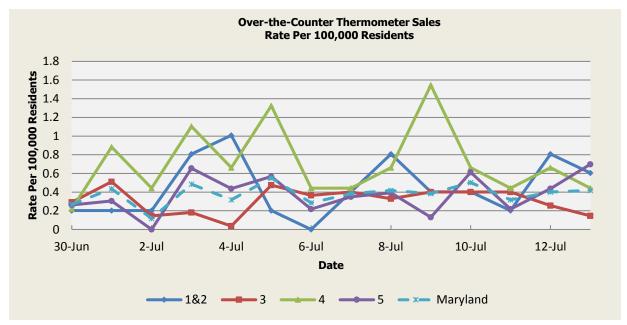


There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.52	4.53	2.69	7.92	5.61
Median Rate*	2.82	3.73	2.43	7.25	4.90

^{*} Per 100,000 Residents

Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.00	2.86	2.27	3.80	3.19
Median Rate*	2.62	2.74	2.21	3.71	3.10

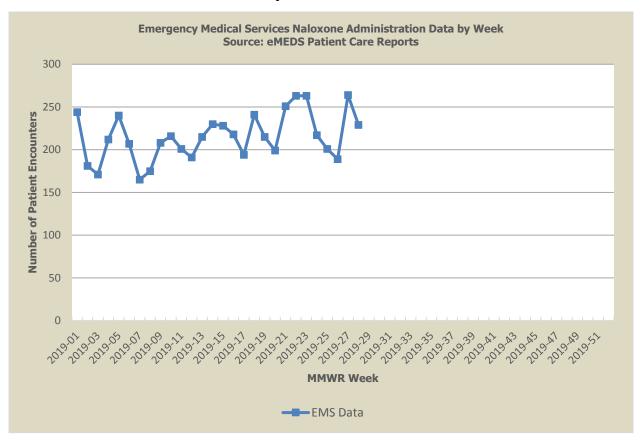
^{*} Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

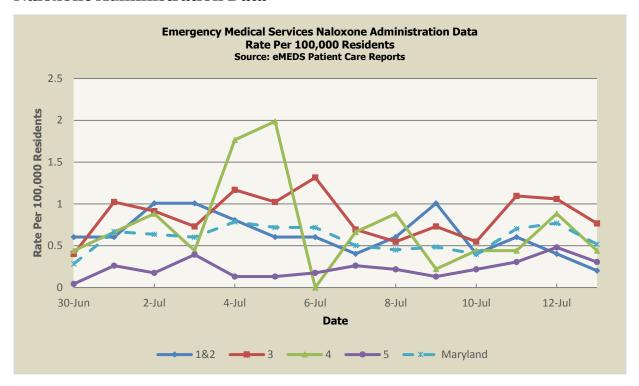
In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of July 18, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 861, of which 455 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

AVIAN INFLUENZA (**BANGLADESH**) 10 Jun 2019, Scientists have identified a novel strain of avian influenza that contained several genetic mutations. A team of researchers at Bangladesh Agricultural University examined 15 dead or sick birds from 13 clinical outbreaks of avian influenza in Bangladesh. The birds in their sample included ducks, geese, chickens and turkeys. Researchers used RT-PCR [reverse transcription polymerase chain reaction] (a laboratory method used to detect genetic material and specific proteins) to detect the virus that affected the birds in their sample. Results indicated that the birds were infected with a new variety of H5N1 influenza. Read More: https://www.promedmail.org/post/6512992

INFLUENZA A, POULTRY (**BELGIUM**) 14 Jun 2019, A poultry farm in Wallonia is the latest affected by the H3 virus, a very mild form of avian influenza currently present in Belgium, according to local media. Since April [2019], dozens of farms have been contaminated in Flanders. The first 2 Walloon cases are located in Libramont and the province of Liege according to the Federal Agency for Food Safety. Infected hens do not die as a direct result but, are more vulnerable and can catch other diseases. It also causes a drop in egg laying in the birds. Read More: https://www.promedmail.org/post/6520580

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week

NATIONAL DISEASE REPORTS

INFANT BOTULISM (TEXAS) 15 Jul 2019, An extremely rare and terrifying condition that only affects infants has been confirmed in East Texas. KLTV is reporting that doctors at the Children's Hospital in Dallas have confirmed that a mother's 4 month old baby was suffering from infant botulism. The 1st sign was when the infant wasn't eating as well as he should have been. He then started sleeping much more than usual and was lethargic in the small amount of time he was awake. After doctors in Jacksonville couldn't figure out what was wrong, the choice was made to head to Dallas. The condition is rare: only 100 babies a year contract it, and the supply of the only treatment was in California. Thankfully, it was flown out immediately and given to the infant in time. He has made a full recovery.

Read More: https://www.promedmail.org/post/6569674

LEGIONELLOSIS (**GEORGIA**) 17 Jul 2019, Officials said 5 guests who stayed at a prominent downtown Atlanta hotel have become sick with legionnaires' disease, prompting an investigation of the hotel on [Mon 15 Jul 2019]. "Based on epidemiological evidence we have an outbreak among people who stayed at the [Sheraton Atlanta] during the same time period," said Nancy Nydam, director of communications at Georgia Department of Public Health, on [Tue 16 Jul 2019]. Legionnaires' is a serious form of pneumonia that is non-contagious. Guests who complained of lung problems and were later diagnosed with legionnaires' [disease] had attended a convention at the Atlanta hotel a couple of weeks ago.

Read More https://www.promedmail.org/post/6573167

UNDIAGNOSED RESPIRATORY ILLNESS (VIRGINIA) 13 Jul 2019, Two people have died and 18 others have been hospitalized after a "respiratory outbreak" at a Virginia retirement community, according to officials. The Fairfax County Department of Health said that 54 individuals had become ill with "respiratory symptoms, ranging from upper respiratory symptoms (cough) to pneumonia" in the last 11 days at Greenspring Retirement Community in Springfield.In a letter Wednesday [10 Jul 2019] to residents obtained by ABC News affiliate WJLA-TV in Washington, DC, Greenspring described symptoms as "fever, cough, body aches, wheezing, hoarseness and general weakness."

Read More: https://www.promedmail.org/post/6565337

E COLI EHEC (**MULTISTATE**) 17 Jul 2019, An international investigation is under way as public health officials report more than 20 people have been infected with _Escherichia coli_linked to ground bison, which is now under recall. "As of 16 Jul 2019, Northfork Bison Distributions Inc is voluntarily recalling its ground bison, referred to as Bison Ground, and its ground bison patties, referred to as Bison Burgers and/or Buffalo Burgers, produced between 22 Feb 2019, and 30 Apr 2019," according to a public alert posted today by the Food and Drug Administration. Consumers should not eat products prepared using recalled ground bison --including bison burgers -- sold under the Northfork Bison label including Bison Burgers sold to

retailers in 4 x 4-ounce packages with expiration dates through 8 Oct 2020, the FDA alert says. So far there are 21 confirmed patients, with at least 8 having been admitted to hospitals. Read More: https://www.promedmail.org/post/6563209

INTERNATIONAL DISEASE REPORTS

SYPHILIS (**EUROPE**) 15 Jun 2019, Syphilis cases have soared in Europe over the last decade and become, for the 1st time since the early 2000s, commoner in some countries than new cases of HIV, health experts said on Friday [12 Jul 2019]. Reported cases of the sexually transmitted disease are up by 70% since 2010, a report from the European Centre for Disease Prevention and Control (ECDC) showed, with the rise driven by more unprotected sex and riskier sexual behavior among gay men. Read More: https://www.promedmail.org/post/6568104

SALMONELLOSIS (**RUSSIA**) 19 Jun 2019, The number of people made ill by food sold in vending machines located in Moscow office buildings belonging to the Healthy Food company has risen to 65, with 17 people remaining in hospitals, the press service of the Moscow department of the Federal Service for the Oversight of Consumer Protection and Welfare informed TASS. Read More: https://www.promedmail.org/post/6575290

E COLI EHEC (EGYPT) 18 Jul 2019, Public Health England has issued a warning after almost 20 cases of Shiga toxin-producing _Escherichia coli_ infection [also called enterohemorrhagic _E. coli (EHEC)] were found in people returning from Egypt in 2019. All travelers had been to the Hurghada region [Red Sea governorate] of Egypt. A variety of different EHEC strains have been detected in visitors to Egypt with serotypes O157 and O26 identified among them. One person developed hemolytic uremic syndrome (HUS), a type of kidney failure associated with _E. coli_ infection.. Read More: https://www.promedmail.org/post/6575137

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions	
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism	
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A	
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)	
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever	
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia	
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)	
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A	
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox	
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)	
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A	

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Region 3	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

